OT D 7 2004 W

CERTIFICATE OF MAILING 37 C.F.R. § 1.8

Thereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

October 5, 2004

Date

Shelley P.M. Fussey

PATENT

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Philip E. Thorpe and Rolf A. Brekken

Serial No.: 10/738,404

Filing Date: December 17, 2003

For: ANTI-VEGF ANTIBODY PRODRUG

METHODS (As Amended)

Group Art Unit: 1642

Examiner: Yaen, C.

Atty. Dkt. No.: 3999.002587

#### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that the present Supplemental Information Disclosure Statement be entered and the documents listed on the enclosed Form PTO-1449 be considered by the Examiner and made of record in the present case. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g),(h), this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

الم وه

**)**,

The present Supplemental Information Disclosure Statement is being filed prior to the

receipt of a first Official Action reflecting an examination on the merits and hence is timely filed

in accordance with 37 C.F.R. § 1.97(b). Therefore, no fees should be due in connection

herewith. Even if an Official Action had been issued in the last few days, no fees would be

required in light of the following information.

In accordance with 37 C.F.R. § 1.97(e)(2), it is hereby certified that the documents listed

in the accompanying Form PTO-1449 were not cited in a communication from a foreign patent

office in a counterpart foreign application. The listed documents were identified during research

conducted by legal representatives of the licensee of the present application in connection with

the licensee's Opposition against a European patent to another. The research was initiated on

about July 20, 2004, and was completed on August 20, 2004, and the present statement is being

filed within three months of the initiation of the research.

No fees should be due in connection with the filing of this Supplemental Information

Disclosure Statement. However, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed

necessary for any reason relating to these materials, the Examiner should contact the undersigned

representative to discuss deduction from Williams, Morgan & Amerson Deposit Account

No. 50-0786/3999.002587.

Respectfully submitted, Williams, Morgan & Amerson, P.C.

Customer No. 23720

Shelley P.M. Fussey, Ph.D.

Reg. No. 39,458

Agent for Applicants

Date: October 5, 2004

10333 Richmond, Suite 1100

Houston, Texas, 77042

(713) 934-4079

2

rorm	PTO-144	9 (modified)		Atty. 1 3999.0	Docket No. 02587		Serial No. 10/738,404	
NP STAN		d Publications for A  ON DISCLOSURE ST.		Applio Thorp	cant e and Brekker			
U. T. U.		everal sheets if necessary		Filing Decem	Date: iber 17, 2003		Group: 1642	
U		Documents Page	_	Patent Do See Page	ocuments 1		Other See Page	
			U.S. Pate	ent Do	cuments			
Exam. Init.	Ref. Des.	Document Number	Da	te	Name	Clas	Sub Class	Filing Dat of App.
		Fo	oreign Pa	itent C	Ocument	ts		<u> </u>
Exam. Init.	Ref. Des.	Document Number	Dat	е	Country	Class	Sub Class	Translation Yes/No
	B19	EP 0 484 401 B1	September	11, 1996				
			Fah-ma-, 21	1991				
	B20	WO 91/02058	February 21	,	ł			

Exam. Init.	Ref. Des.	Citation
	C99	Aiello, "Suppression of Retinal Neovascularization In Vivo by Inhibition of Vascular Endothelial Growth Factor (VEGF) Using Soluble VEGF-Receptor Chimeric Proteins," <i>Proc. Natl. Acad. USA</i> , 92:10457-10461, 1995.
	C100	Alvarez et al., "Localization of Basic Fibroblast Growth Factor and Vascular Endothelial Growth Factor in Human Glial Neoplasms," <i>Modern Pathology</i> , 5(3):303-307, 1992.
	C101	Auerbach, "Vascular Endothelial Cell Differentiation: Organ-Specificity and Selective Affinities as the Basis for Developing Anti-Cancer Strategies," <i>Int. J. Radiat. Biol.</i> , 60(1/2):1-10, 1991.
	C102	Baird et al., "Immunoreactive Fibroblast Growth Factor (FGF) in a Transplantable Chondrosarcoma: Inhibition of Tumor Growth by Antibodies to FGF," J. Cell. Biochem., 36:79-85, 1986.
	C103	Berse <i>et al.</i> , "Vascular Permeability Factor (Vascular Endothelial Growth Factor) Gene is Expressed Differentially in Normal Tissues, Macrophages, and Tumors," <i>Molecular Biology Cell</i> , 3:211-220, 1992.
	C104	Berse et al., "Vascular Permeability Factor Vascular Endothelial Cell Growth Factor Expression in Normal Tissues and in Tumors," J. Cell Biol., 115(3 part 2):421a, Abstract No. 2443, 1991.

Examiner:	DATE CONSIDERED:
EXAMINER:	DATE CONSIDERED:

e e e	
Form PTO-1449 (modified) OCT	Atty. Docket N 3999.002587
List of Patents and Publications for Associatant's	Applicant Thorpe and B
Information Disclosure Statement	
(Use several sheets if necessary)	Filing Date:

Atty. Docket No.	Serial No.	
3999.002587	10/738,404	
Applicant		
Thorpe and Brekken		
Filing Date:	Group:	

(Use several sheets if necessary)

**U.S. Patent Documents** 

See Page

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C105	Broadley et al., "Monospecific Antibodies Implicate Basic Fibroblast Growth Factor in Normal Wound Repair," Lab. Invest., 61(5):571-575, 1989.
	C106	Brock et al., "Tumor-Secreted Vascular Permeability Factor Increases Cytosolic Ca <sup>2+</sup> and von Willebrand Factor Release in Human Endothelial Cells," Am. J. Path., 138(1):213-221, 1991.
•	C107	Brown et al., "Leaky Vessels, Fibrin Deposition, and Fibrosis: A Sequence of Events Common to Solid Tumors and to Many Types of Disease," Am. Rev. Respir. Dis., 140:1104-1107, 1989.
	C109	Clauss et al., "Vascular Permeability Factor: A Tumor-Derived Polypeptide that Induces Endothelial Cell and Monocyte Procoagulant Activity, and Promotes Monocyte Migration," J. Exp. Med., 172:1535-1545, 1990.
	C109	Conn et al., "Purification of a Glycoprotein Vascular Endothelial Cell Mitogen from a Rat Glioma-Derived Cell Line," Proc. Nat. Acad. Sci. USA, 87:1323-1327, 1990.
	C110	Conn et al., "Amino Acid and cDNA Sequences of a Vascular Endothelial Cell Mitogen that is Homologous to Platelet-Derived Growth Factor," Proc. Natl. Acad. Sci. USA, 87:2628-2632, 1990.
	C111	Connolly, "Vascular Permeability Factor: A Unique Regulator of Blood Vessel Function," J. Cell Biochem., 47:219-223, 1991.
	C112	Connolly, "Tumor Vascular Permeability Factor Stimulates Endothelial Cell Growth and Angiogenesis," <i>J. Clin. Invest.</i> , 84:1470-1478, 1989.
	C113	Denekamp, "Vasculature as a Target for Tumour Therapy," <i>Prog. Appl. Microcirc.</i> , 4:28-38, 1984.
	C114	Dennis and Rifkin, "Studies on the Role of Basic Fibroblast Growth Factor <i>In Vivo</i> : Inability of Neutralizing Antibodies to Block Tumor Growth," <i>J. Cell. Physiol.</i> , 144:84-98, 1990.
	C115	Dvorak et al., "Vascular Permeability Factor, Fibrin, and the Pathogenesis of Tumor Stroma Formation," Ann. N.Y. Acad. Sci., 667:101-111, 1992.
	C116	Dvorak, "Leaky Tumor Vessels: Consequences for Tumor Stroma Generation and for Solid Tumor Therapy," <i>Progress in Clinical and Bioilogical Research</i> , 354a: 317-330, 1990.
	C117	Dvorak, "Tumors: Wounds That Do Not Heal," New Eng. J. Med., 315(26):1650-1659, 1986.
	C118	Dvorak et al., "Regulation of Extravascular Coagulation by Microvascular Permeability," Science, 227:1059-1061, 1985.

EXA	М	IN	E	₹:
	LIVE			

DATE CONSIDERED:

	· · · · · · · · · · · · · · · · · · ·
Form PTO-1449 (mod	ified) DCT 0 7 2004 &
	licetions for Applicant's

Atty. Docket No.

Serial No.

3999.002587

Applicant

Thorpe and Brekken

INFORMATION DISCLOSURE STATEMENT

TON DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date: Group:
December 17, 2003 1642

U.S. Patent Documents

See Page

Foreign Patent Documents

See Page 1

Other Art
See Pages 1-5

### Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation	
	C119	Dvorak et al., "Fibrin as a Component of the Tumor Stroma: Origins and Biological Significance," Cancer Metastasis Reviews, 2:41-73, 1983.	
	C120	Ferrara et al., "Expression of Vascular Endothelial Growth Factor Does Not Promote Transformation but Confers a Growth Advantage In Vivo to Chinese Hamster Ovary Cells," J. Clin. Invest., 91:160-170, 1993.	
	C121	Ferrara et al., "The Vascular Endothelial Growth Factor Family of Polypeptides," J. Cell. Biochem., 47:211-218, 1991.	
	C122	Ferrara and Henzel, "Pituitary Follicular Cells Secrete A Novel Heparin Binding Growth Factor Specific for Vascular Endothelial Cells." <i>Biochem. Biophys. Res. Comm.</i> , 161(2):851-858, 1989.	
	C123	Ferrara et al., "Molecular Characterization and Distribution of Vascular Endothelial Growth Factor," J. Cell Biochem. Supp., 151(part F):p211, 1991, Abstract No. CF016.	
	C124	Folkman and Ingber, "Inhibition of Angiogenesis," Seminars in Cancer Biology, 3:89-96, 1992.	
	C125	Folkman and Shing, "Angiogenesis," J. Biol. Chem., 267(16):10931-10934, 1992.	
	C126	Folkman et al., "Induction of Angiogenesis During the Transition from Hyperplasia to Neoplasia," Nature, 339:58-61, 1989.	
	C127	Folkman, "What is the Evidence that Tumors are Angiogenesis Dependent?," J. Natl. Cancer Inst., 82(1):4-6, 1990.	
	C129	Folkman and Klagsbrun, "Angiogenic Factors," Science, 235:442-447, 1987.	
	C129	Gospodarowicz <i>et al.</i> , "Isolation and Characterization of a Vascular Endothelial Cell Mitogen Produced by Pituitary-Derived Folliculo Stellate Cells," <i>Proc. Natl. Acad. Sci.</i> , 86:7311-7315, 1989.	
	C130	Greenblatt and Shubi, "Tumor Angiogenesis: Transfilter Diffusion Studies in the Hamster by the Transparent Chamber Technique," <i>J. Natl. Cancer Inst.</i> , 41:111-124, 1968.	
	C131	Houck et al., "The Vascular Endothelial Growth Factor Family: Identification of a Fourth Molecular Species and Characterization of Alternative Splicing of RNA," Molecular Endocrinology, 5:1806-1814, 1991.	
	C132	Jain, "Haemodynamic and Transport Barriers to the Treatment of Solid Tumours," Int. J. Radiat. Biol., 60(1/2):85-100, 1991.	

EXAMINER:

**DATE CONSIDERED:** 

Form PTO-1449 (modified) 07 2004
List of Patents and Publications for Applicant's
RADEMART
INFORMATION DISCLOSURE STATEMENT

Atty. Docket No.	Serial No.	
3999.002587	10/738,404	
Applicant		
Thorpe and Brekken		
-		

(Use several sheets if necessary)

Filing Date: Group: December 17, 2003 1642

U.S. Patent Documents

See Page

Foreign Patent Documents See Page 1 Other Art
See Pages 1-5

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C133	Jakeman et al., "Binding Sites for Vascular Endothelial Growth Factor are Localized on Endothelial Cells in Adult Rat Tissues," J. Clin. Invest., 89:244-253, 1992.
,	C134	Keck et al., "Vascular Permeability Factor, an Endothelial Cell Mitogen Related to PDGF," Science, 246:1309-1312, 1989.
	C135	Kerbel, "Inhibition of Tumor Angiogenesis as a Strategy to Circumvent Acquired Resistance to Anti-Cancer Therapeutic Agents," <i>BioEssays</i> , 13(1):31-36, 1991.
	C136	Leung et al., "Cloning, Expression During Development, and Evidence for release of a Trophic Factor for Ciliary Ganglion Neurons," <i>Neuron</i> , 8:1045-1053, 1992.
	C137	Leung et al., "Vascular Endothelial Growth Factor is a Secreted Angiogenic Mitogen," Science, 246:1306-1308, 1989.
	C138	Li et al., "Monoclonal Antibodies to Recombinant Human Vascular Endothelial Growth Factor (rHuVEGF)," J. Cell. Biochem., Supp. 15F:251, Abstract CF417, 1991.
	C139	Pepper et al., "Potent Synergism Between Vascular Endothelial Growth Factor and Basic Fibroblast Growth Factor in the Induction of Angiogenesis In Vitro" Biochem. Biophys. Res. Comm., 189(2):824-831, 1992.
	C140	Plate, "Vascular Endothelial Growth Factor is a Potential Tumour Angiogenesis Factor in Human Gliomas <i>In vivo</i> ," <i>Nature</i> , 359:845-848, 1992
	C141	Plouet et al., "Isolation and Characterization of a Newly Identified Endothelial cell Mitogen Produced by AtT-20 Cells," EMBO, 8(12):3801-3806, 1989.
	C142	Roberts and Palade, "Increased Microvascular Permeability and Endothelial Fenestration Induced by Vascular Endothelial Growth Factor," <i>J. Cell Sci.</i> , 108:2369-2379, 1995.
	C143	Senger et al., "A Highly Conserved Vascular Permeability Factor Secreted by a Variety of Human and Rodent Tumor Cell Lines," Cancer Research, 46:5629-5632, 1986.
	C144	Senger et al., "Purification and NH <sub>2</sub> -Terminal Amino Acid Sequence of Guinea Pig Tumor-Secreted Vascular Permeability Factor," Cancer Research, 50:1774-1778, 1990.
	C145	Shweiki <i>et al.</i> , Vascular Endothelial Growth Factor Induced by Hypoxia May Mediate Hypoxia-Initiated Angiogenesis," <i>Nature</i> , 359:843-845, 1992.
	C146	Sioussat <i>et al.</i> , "Anti-Peptide Antibodies to Vascular Permeability Factor," <i>J. Cell Biol.</i> , 115(3 part 2):p264A, Abstract No. 1528, 1991.

EXAMINER	Ex	AM	IN	ER	
----------	----	----	----	----	--

DATE CONSIDERED:

•		
Form PTO-1449 (m	estrection 7 2004	Atty. Docket No. 3999.002587
List of Patents and Pu	ublications for applicant's	Applicant Thorpe and Brekken
Information D	ISCLOSURE STATEMENT	•
		Filing Date:

Atty. Docket No.	Serial No.	
3999.002587	10/738,404	
Applicant		
Thorpe and Brekken		
•		

(Use several sheets if necessary)

Filing Date: Group: December 17, 2003 1642

U.S. Patent Documents

See Page

Foreign Patent Documents See Page1 Other Art
See Pages 1-5

# Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation		
	C147	Tischer et al., "Vascular Endothelial Growth Factor: A New Member of the Platelet-Derived Growth Factor Gene Family," Biochem. Biophys Res. Comm., 165(3):1198-1206, 1989.		
	Van Brugen et al., "VEGF Antagonism Reduces Edema Formation and Tissue Damage After Ischemia/Reperfusion Injury in the Mouse Brain," J. Clin. Invest., 104(11):1613-1620, 1999.			
	C149	Weidner, "Tumor Angiogenesis and Metastasis-Correlation in Invasive Breast Carcinoma," New. Eng. J. Med., 324(1):1-7, 1991.		
	Yeo et al., "Vascular Permeability Factor (Vascular Endothelial Growth Factor) in Guinea Pig and Human Tumor and Inflammatory Effusions, Cancer Research, 53:2912-2918, 1993.			
	C151	Yeo et al., "Development of Time-Resolved Immunofluorometric Assay of Vascular Permeability," Clin. Chem., 38(1):71-75, 1992.		

T7				_	_
Ex	A	MA			D٠
T-A	~	TAT	117	ندا	1.

DATE CONSIDERED: